



6362 FERRIS SQUARE, SUITE C
SAN DIEGO, CALIFORNIA 92121
(858) 452-5963
FAX (858) 453-0625
Home FAX (858) 459-3550
Email: ram@ramcogen.net

RICHARD A. McCORMACK
President

May 11, 2001

Mr. Roger Johnson
California Energy Commission
Second Floor
1516 Ninth Street, MS-15
Sacramento, CA 95814

Subject: RAMCO Emergency Peaker Application – Chula Vista II Generating Station

Dear Mr. Johnson:

Enclosed is RAMCO, Inc.'s (RAMCO) Application for an Expedited 21 Day Emergency Permitting for expansion of its Chula Vista Generating Station.

The Chula Vista I Generating Station is a 44 MW combustion turbine peaking facility currently under construction under approvals granted by the Redevelopment Agency of the City of Chula Vista. This application is to add a second peaking unit, Chula Vista II, with a capacity of 62.4 MW. This second unit will operate initially with Dry Low NOx Burners only, at 25 ppm or less, followed by the addition of Selective Catalytic Reduction (SCR) in the 2001-2002 off-peak season reducing NOx to 5 ppm.

Emissions from the existing turbine currently under construction combined with emissions from the proposed Chula Vista II unit will not exceed the major source thresholds. Operating hours of both units will be adjusted to allow concurrent and non-concurrent operation such that the major source emissions thresholds will not be exceeded. Under this operating procedure no offsets will be required. Annual concurrent operating hours during initial operations will be approximately 1,130 hours and 3,325 hours after the SCR is installed on the proposed unit.

This application is for a permanent permit for the proposed expansion unit, Chula Vista II. Once the CEC permit is granted, along with any required local permits, construction will commence. Construction of the proposed facility is anticipated to require approximately 100 days from mobilization. RAMCO will make every reasonable effort to achieve the earliest commercial operation date. It is hoped that the proposed facility can be on-line before the September 30, 2001 date specified in Executive Order D-28-01. However, the permit cannot be conditioned on a "drop dead" commercial operation date.

Mr. Roger Johnson

May 11, 2001

Page 2

RAMCO has provided the reports listed in Attachment D "California Energy Commission Standard Conditions of Certification Emergency Permitting Projects" but did not include proprietary or financial documents. We look forward to working with you and your staff on this matter.

Contacts for RAMCO concerning this application are:

Mr. Richard A. McCormack
President
RAMCO, Inc.
6362 Ferris Square
Suite C
San Diego, CA 92121
858.452.5963
858.453.0625 Fax

Mr. Dale E. Mesple
Project Developer
RAMCO, Inc.
1104 Rock Creek Way
Concord, CA 94521
925.672.1657
925.672.7504 FAX
925.366.4400 (Cell)

Ms. Jan McFarland
Consultant
Fairhaven Institute
1100 Eleventh Street
Suite 311
Sacramento, CA 95814

916.447.7983
916.447.2940
443.336.1402(Cell)

Notices should be directed to all three contacts. We look forward to working with the Energy Commission to a successful conclusion to this permit process.

Sincerely,



Richard A. McCormack
President

Expansion Emergency Power Plant Permitting Application

RAMCO, Inc.

Chula Vista Peaker Generating Station

Submitted to:

California Energy Commission

Submitted By:

RAMCO, Inc.



May 11, 2001

ATTACHMENT A
CALIFORNIA ENERGY COMMISSION
EMERGENCY SITING PROCESS APPLICATION CHECK LIST

REQUIREMENT	YES/NO	PAGE IN APPLICATION
1 Project Description		
1.1 Project owner/operator (Name, title, address, phone)	YES	1-1
1.2 Overview of power plant and linear facilities	YES	1-1
1.3 Structure demensions (size and height), plan and profile	YES	1-2
1.4 Full size color photo of the site and rendering of proposed facility if available	YES	1-2
1.5 Maximum foundation depth, cut and fill quantities	YES	1-2
1.6 Conformance with California Building Code	YES	1-3
1.7 Proposed operation (hours per year)	YES	1-3
1.8 Expected on-line date	YES	1-3
1.9 Proposed duration of operation (years)	YES	1-4
1.10 Identify transmission interconnection facilities	YES	1-4
1.11 Transmission interconnection application	YES	1-4
1.12 "Down-stream" transmission facilities, if known	YES	1-4
1.13 Fuel interconnection facilities	YES	1-4
1.14 Fuel interconnection application	YES	1-4
1.15 Water requirements and treatment	YES	1-4
1.16 Water interconnection facilities (supply/discharge)	YES	1-5
1.17 Source and quality of water supply	YES	1-6
1.18 Water supply agreement/proof of water supply	YES	1-6
2 Site Description		
2.1 Site address (street, city, county)	YES	2-1
2.2 Assessor's parcel number	YES	2-1
2.3 Names and addresses of all property owners within 500 feet of the project site or related facilities in both hard copy and electronic mail merge format.	YES	2-1
2.4 Existing site use	YES	2-1
2.5 Existing site characteristics (paved, graded, etc.)	YES	2-1
2.6 Layout of site (include plot plan)	YES	2-1
2.7 Zoning and general plan designations of site and linear facilities	YES	2-1
2.8 Ownership of site (Name, address, phone)	YES	2-1
2.9 Status of site control	YES	2-1
2.9 Equipment laydown area – size and location	YES	2-1
3 Construction Description		
3.1 Construction schedule	YES	3-1
3.2 Workforce requirements (peak, average)	YES	3-1
4 Power Purchase Contract (DWR, ISO, other)		
4.1 Status of negotiations and expected signing date	YES	4-1
5 Air Emissions		
5.1 Nearest monitoring station (location, distance)	YES	5-1
5.2 Provide complete self certification air permit checklist	YES	5-1
5.3 Provide complete air permit application	YES	5-1
5.4 Status of air permit application with air district	YES	5-1
5.5 Status of offsets and/or mitigation fees, as required	YES	5-1
6 Noise		
6.1 Local noise requirements	YES	6-1
6.2 Nearest sensitive receptor (type, distance)	YES	6-1
6.3 Project noise level at nearest property line	YES	6-1
6.4 Proposed mitigation if required	YES	6-1

REQUIREMENT	YES/NO	PAGE IN APPLICATION
7 Hazardous Materials		
7.1 Type and volume of hazardous materials on-site	YES	7-1
7.2 Storage facilities and containment	YES	7-1
8 Biological resources		
8.1 Legally protected species* and their habitat on site, adjacent to site and along right of way for linear facilities (<i>*threatened or endangered species on State or federal lists, State fully protected species</i>)	YES	8-1
8.2 Designated critical habitat on site or adjacent to site (wetlands, vernal pools, riparian habitat, preserves)	YES	8-1
8.4 Proposed mitigation as required	YES	8-1
9 Land Use		
9.1 Local land use restrictions (height, use, etc.)	YES	9-1
9.2 Use of adjacent parcels (include map)	YES	9-1
9.3 Ownership of adjacent parcels – site and linears	YES	9-1
9.4 Demographics of census tract where project is located (most current available)	YES	9-1
10 Public Services		
10.1 Ability to serve letter from Fire District	YES	10-1
10.2 Nearest fire station	YES	10-1
11 Traffic and Transportation		
11.1 Level of Service (LOS) measurements on surrounding roads – a.m. and p.m. peaks	YES	11-1
11.2 Traffic Control Plan for roads during construction	YES	11-1
11.3 Traffic impact of linear facility construction	YES	11-1
11.4 Equipment transport route	YES	11-1
11.5 Parking requirements – workforce and equipment	YES	11-1
12 Soils and Water Resources		
12.1 Wastewater volume, quality, treatment	YES	12-1
12.2 Status of permits for wastewater discharge or draft permit (WDR/NPDES)	YES	12-2
12.3 Draft Erosion Prevention and Sedimentation Control Plan or Mitigation Strategy	YES	12-3
12.4 Spill Prevention/Water Quality Protection Plans	YES	12-3
13 Cultural Resources		
13.1 Identification of known historic/prehistoric sites	YES	13-1
13.2 Proposed mitigation if required	YES	13-1
13.3 Notification of Native Americans	YES	13-1
14 Paleontological Resources		
14.1 Identification of known paleontologic sites	YES	14-1
14.2 Proposed mitigation if required	YES	14-1
15 Visual resources		
15.1 Plan for landscaping and screening to meet local requirements	YES	15-1
15.2 Full size color photo of the site and rendering of proposed facility with any proposed visual mitigation if available	YES	15-1
16 Transmission System Engineering		
16.1 Conformance with Title 8, High Voltage Electrical Safety Orders, CPUC General Order 95 (or NESC), CPUC Rule 21, PTO Interconnection Requirements, and National Electric Code	YES	16-1

Table of Contents

Section	Page
1. Project Description	
1.1 Project Owner/Operator	1-1
1.2 Overview of power plant and linear facilities	1-1
1.3 Structure dimensions, plan and profile	1-2
1.4 Full size color photo of the site.....	1-2
1.5 Maximum foundation depth, cut and fill quantities	1-2
1.6 Conformance with California Building Code	1-3
1.7 Proposed operation (hours per year)	1-3
1.8 Expected on-line date	1-3
1.9 Proposed duration of operation (years)	1-4
1.10 Identify transmission interconnection facilities	1-4
1.11 Transmission interconnection application	1-4
1.12 Down-stream transmission facilities , if known	1-4
1.13 Fuel interconnection facilities	1-4
1.14 Fuel interconnection application	1-4
1.15 Water requirements and treatment	1-4
1.16 Water interconnection facilities (supply/discharge)	1-5
1.17 Source and quality of water supply	1-6
1.18 Water supply agreement / proof of water supply	1-6
2. Site Description	
2.1 Site address	2-1
2.2 Assessor's parcel number	2-1
2.3 Names and addresses of all property owners within 500 feet of the project site or related facilities	2-1
2.4 Existing site use	2-1
2.5 Existing site characteristics	2-1
2.6 Layout of site	2-1
2.7 Zoning and general plan designations of site and linear facilities ...	2-1
2.8 Ownership of site	2-1
2.9 Status of site control	2-1
2.10 Equipment lay-down area	2-1
3. Construction Description	
3.1 Construction schedule	3-1
3.2 Workforce requirements	3-1
4. Power Purchase Contract	
4.1 Status of negotiations and expected signing date	4-1

5.	Air Emissions	
5.1	Nearest monitoring station	5-1
5.2	Provide complete self-certification air permit checklist	5-1
5.3	Provide complete air permit application	5-1
5.4	Status of air permit application with air district	5-1
5.5	Status of offsets and/or mitigation fees, as required.....	5-1
	End of Section 5: CEC Application Attachments B & C	
6.	Noise	
6.1	Local noise requirements	6-1
6.2	Nearest sensitive receptor	6-1
6.3	Project noise level at the nearest property line	6-1
6.4	Proposed mitigation if required.....	6-1
7.	Hazardous Materials	
7.1	Type and volume of hazardous materials on-site	7-1
7.2	Storage facilities and containment	7-1
8.	Biological resources	
8.1	Legally protected species and their habitat on-site, adjacent to site and along right of way of linear facilities.....	8-1
8.2	Designated critical habitat on site or adjacent to site	8-1
8.3	Proposed mitigation as required	8-1
9.	Land Use	
9.1	Local land use restrictions	9-1
9.2	Use of adjacent parcels	9-1
9.3	Ownership of adjacent parcels – site and linears.....	9-1
9.4	Demographics of census tract where project is located	9-1
10.	Public Services	
10.1	Ability to serve letter from Fire District	10-1
10.2	Nearest fire station	10-1
11.	Traffic and Transportation	
11.1	Level of Service (LOS) measurements on surrounding roads	11-1
11.2	Traffic Control Plan for roads during construction	11-1
11.3	Traffic impact of linear facility construction	11-1
11.4	Equipment transport route	11-1
11.5	Parking requirements – workforce and equipment	11-1
12.	Soils and Water Resources	
12.1	Wastewater volume, quality, treatment	12-1
12.2	Status of permits for wastewater discharge or draft permit (WDR/NPDES).....	12-2
12.3	Draft Erosion Prevention and Sedimentation Control Plan or Mitigation Strategy	12-3

12.4	Spill Prevention/Water Quality Protection Plan	12-3
13.	Cultural Resources	
13.1	Identification of known historical /prehistoric sites	13-1
13.2	Proposed mitigation if required.....	13-1
13.3	Notification of Native Americans	13-1
14.	Paleontological Resources	
14.1	Identification of known paleontologic sites	14-1
14.2	Proposed mitigation if required.....	14-1
15.	Visual resources	
15.1	Plan for landscaping and screening to meet local requirements	15-1
15.2	Full size color photo of the site and rendering of proposed facility with any proposed visual mitigation if available.....	15-1
16.	Transmission System Engineering	
16.1	Conformance with Title 8, High Voltage Electrical Safety Orders, CPUC General Order 95 (or NESC), CPUC Rule 21, PTO Interconnection Requirements, and National Electric Code	16-1

Appendices:

Appendix A:	Unit Specifications
Appendix B:	Site Plan and Equipment Lay-Down
Appendix C:	Typical Elevations
Appendix D:	Project Data Boundary and Topography
Appendix E:	Existing Grading
Appendix F:	Landscape Plan
Appendix G:	Aerial Photograph
Appendix H:	Interconnection Facility Information
Appendix I:	Sweetwater Authority Water Analysis
Appendix J:	Construction Schedule
Appendix K:	Ability to Serve Letter from Fire District
Appendix L:	Adjacent Property Owners List
Appendix M:	CEC Application Attachment D and City of Chula Vista Resolution No. 1699
Appendix N:	Noise Impact Analysis
Appendix O:	Biological Resources Survey
Appendix P:	IUD Permit Application
Appendix Q:	Industrial Activities Storm Water General Permit NOI
Appendix R:	RMP Public Document
Appendix S:	Hazardous Materials Business Plan
Appendix T:	Authority To Construct Application
Appendix U:	Mitigated Negative Declaration and Initial Study for the Chula Vista I Unit

1 Project Description

1.1 Project Owner/Operator

Mr. Richard A. McCormack
RAMCO, Inc,
6362 Ferris Square, Suite C
San Diego, CA 92121

858.452.5963
858.453.0625 FAX

1.2 Overview of power plant and linear facilities

This application is for the expansion of the Chula Vista Generating Station. The existing plant, Chula Vista I, consists of one 44 MW natural gas fired combustion turbine that will be operational in May 2001. There will be no changes to this existing facility. This application addresses only issues related to the proposed expansion unit, Chula Vista II.

The proposed facility, Chula Vista II, has a rated output of 62.4 MW (ISO rated) and is proposed to have two operating periods. During the initial operating period, the proposed unit will be equipped with Series A dry low NO_x burners (DLN) which will limit the unit output to 58.0 MW due to combustor temperature limitation and no Selective Catalytic Reduction (SCR). This use of Series A combustors is necessary as the Series C DLN combustors will not be available until 2002. During the final operating period, the proposed unit will be fitted with Selective Catalytic Reduction (SCR) and Series C DLN combustors. The installation of the SCR and Series C DLN combustors will occur before June 1, 2002. Please refer to Appendix A, Unit Specifications.

Annual air emissions at the Chula Vista site with the proposed 62.4 MW unit will remain below the major source thresholds. The proposed expansion will have state-of-the-art air pollution control equipment -- Dry Low NO_x burners with tailpipe SCR (in its final configuration), and a CO oxidation catalyst. The facility will be fueled solely by natural gas.

The Chula Vista II project requires no new linear facilities. The project will interconnect to SDG&E's electricity transmission system through the existing 69 kV generator lead from Chula Vista I to the Otay substation. Natural gas will be delivered via an existing 8 inch San Diego Gas and Electric gas transmission pipeline. SDG&E has determined that the existing 8-inch gas line can accommodate the proposed Chula Vista II project. Adequate water supplies are available from the Sweetwater Authority at the site for the proposed Chula Vista II project. The proposed Chula Vista project, will require a two-inch lateral with a 1-1/2 inch meter to serve the 33 GPM demand of the proposed unit. Both the service for the existing Chula Vista I and the service for the proposed Chula Vista II can be connected to the 4-inch water line already installed to the site. Please refer to Appendix H, Interconnection Facility Information.

1.3 Structure dimensions, plan and profile

The proposed Chula Vista II project is a fully enclosed gas turbine expansion is approximately 115 feet in length, 20 feet wide and 10 feet high. The turbine will be fitted with state-of-the-art air pollution control equipment, noise suppression devices and exhaust stack. The air pollution control equipment will be approximately 130 feet in length, 38 feet wide and 35 feet high and utilize Selective Catalytic Reduction with aqueous ammonia. The exhaust stack for the expansion turbine will be 8 feet wide, 38 feet long (inside dimensions) and 40 feet high. The main portion of the plant will be housed in an enclosure 100 feet in width, 80 feet long and 25 feet high.

During the initial operating period, the proposed Chula Vista II plant will operate with only Dry Low NOx burners (Series A) that will be utilized for emissions control. The SCR super structure and Series C combustors will be installed during the off-peak season of 2001 –2002. Until the SCR is installed, the hours of operation of the plant will be reduced so that the emissions will not exceed the major source threshold for the entire site.

During the initial operating period, the proposed Chula Vista II turbine will be fitted with silencers on each output stack to reduce noise levels to the levels allowed under the Conditional Use Permit approved by the City of Chula Vista for the existing unit. Additionally, noise reduction devices will be added as required in the final design to ensure compliance with the existing noise mitigation and compliance program. The temporary sound wall used to mitigate construction noise for the existing Chula Vista I project will be maintained during the construction of the proposed Chula Vista II project to ensure that construction noise levels are maintained below 60 dba at the southern property line adjacent to the sensitive habitat. Further, a lay down area for fabrication and welding has been established to the north and west of the Chula Vista II location eliminating any potential noise levels greater than 60 dba.

For further information on the proposed facility, please refer to Appendix B, Site Plan and Equipment-Lay-Down, Appendix C, Typical Elevations, Appendix D, Project Data Boundary and Topography, Appendix E, Existing Grading, and Appendix F, Landscape Plan.

1.4 Full size color photo of the site

See Appendix G, Aerial Photograph.

1.5 Maximum foundation depth, cut and fills quantities

The Chula Vista site is currently graded and will require minimal additional grading for the proposed Chula Vista II unit. Equipment pads and on-site roads will be required for the proposed Chula Vista II turbine. Cut and fills will be balanced to the extent possible. It is currently estimated that a net export of approximately 3,000 yards of soil will be

required. The maximum foundation depth is 7 feet 6 inches for the generator and 3 feet for the turbine block. All foundation excavation materials will be incorporated into the site grading balance to the extent possible.

1.6 Conformance with California Building Code

The proposed expansion facility will be constructed in accordance with latest California Building Code (1998).

1.7 Proposed operation (hours per year)

The proposed Chula Vista II facility will be operated in conjunction with the existing turbine and within the annual emission limits. The existing Chula Vista I turbine is permitted to operate as a minor source with maximum annual operating hours of 4,620 hours for the life of the project. The estimated annual hours of operation for the proposed Chula Vista II unit are listed below. In no instance will the operating hours of the proposed unit result in increases of air emissions or noise limits at the Chula Vista site over what is currently permitted by the Condition Use Permit (COP) for the existing Chula Vista I unit. Non-concurrent hours of operation for each of the units will be limited in such a manner that in no case will the aggregate annual emissions for the entire facility exceed those approved for the existing turbine.

- Permanent Operations (Summer 2002 and beyond):

3,325 hours for proposed Chula Vista II turbine and the existing Chula Vista I turbine for concurrent operation of both turbines.
- Interim Operations (September, 2001 until installation and commissioning of SCR system and Series C combustors):

1,130 hours for proposed Chula Vista II turbine and the existing Chula Vista I turbine for concurrent operation of both turbines.

1.8 Expected on-line date

The anticipated on-line date for the proposed Chula Vista II unit is September 30, 2001 provided all state and local permit approvals are obtained in a timely manner. It is anticipated that construction will require approximately 100 days. RAMCO will make every reasonable effort to meet this commercial operation date including double shifting and weekend work. Construction for installation of SCR and Series C combustors will be completed after October 31, 2001 and no later than June 1, 2002. Please refer to Appendix J, Construction Schedule.

1.9 Proposed duration of operation (years)

The proposed Chula Vista II unit is to be permitted on a permanent basis with a life expectancy of 25 years.

1.10 Identify transmission interconnect facilities

Electrical interconnection has been completed as a part of the existing Chula Vista I facility and has adequate capacity to accommodate the proposed unit. Please refer to Appendix H for a schematic diagram of the interconnection facilities.

1.11 Transmission interconnection application

Please refer to Appendix H for the application letters sent to SDG&E for the proposed Chula Vista II.

1.12 Down-stream transmission facilities, if known

None required.

1.13 Fuel interconnection facilities

The plant is currently served by an 8-inch gas line. The calculated total gas requirement is 1,586,000 scfm for the full power operation of the proposed Chula Vista II unit and the existing Chula Vista I unit.

Please refer to a letter from SDG&E in Appendix H (Dusi letter dated April 24, 2001) confirming the capacity of the gas line.

1.14 Fuel interconnection application

Please refer to letter from SDG&E in Appendix H (Dusi Letter dated April 24, 2001).

1.15 Water requirements and treatment

The estimated water requirements are listed below for Chula Vista I (existing unit) and Chula Vista II (expansion unit):

<u>Water Use</u>	<u>Existing Unit</u>	<u>Expansion Unit</u>
1) Fogging, gpm	18	23
gallons, annual	3.5 x10 ⁶	4.5 x 10 ⁶
2) Landscaping	34	(included w/Existing Unit)

gallons, annual	1.25 x 10 ⁵	(included w/Existing Unit)
3) Domestic, O&M	10	10
gallons, annual	3 x 10 ³	3 x 10 ³
Total (max), gpm	58	33
gallons, annual	3.628 x 10⁶	4.503 x 10⁶

The annual water usage is a conservative estimate based upon operation of both units for 3,200 hours per year.

The “fogging” water is demineralized and is treated by an on-site demineralizer unit, which is trailer mounted and transported off-site for regeneration. The “fogging” water is injected into the inlet combustion air and is exhausted through the engine exhaust along with the other combustion products.

1.16 Water interconnection facilities (supply/discharge)

Water is supplied by the Sweetwater Authority, a public water agency, headquartered in Chula Vista, CA. A 4-inch domestic water line and an 8-inch fire main were installed to the site from existing Sweetwater Authority water mains at Main & Albany Streets.

The drawing in Appendix H shows the domestic water (4”) and fire main (8”) lines to the site from Albany Street and the on-site lines for the existing Chula Vista I unit. Also indicated on these drawings are the connecting lines that will provide water to the expansion Chula Vista II unit. Please note that there are two fire hydrants shown for the existing plant, while two additional hydrants are planned for the expansion plant. Fire Hydrant Flow Test(s) conducted by the Sweetwater Authority for the two hydrants on the existing unit indicated a flow rate well in excess of the required 1500 gpm (2024 gpm) and a residual pressure, R, greater or equal to 20 psi (62 psi).

Also attached in Appendix H is a letter from The Sweetwater Authority stating that they are able to provide the water requirements of the proposed Chula Vista II unit.

Most of the water used on site (i.e. water used for the fogging system and landscaping) will be disposed of to the atmosphere by evaporation, through the fogging system water for the combustion engines and landscaping irrigation. This condition will remain constant throughout the operation of the expansion unit.

The limited amount of water used for operations and maintenance (O&M) will be collected in drains leading to containment basins, tested and released to the sewer in accordance with monitoring and disposal procedures approved for the existing Chula Vista I unit. The entire site has been graded to direct storm runoff to the existing storm

outfall and energy dissipator sized to accommodate the runoff from the entire site. Existing sewer lines are available on-site.

1.17 Source and quality of water supply

The Sweetwater Authority supplies water to the existing Chula Vista I unit by means of a 4-inch domestic water line and an 8-inch fire main connected to mains at the intersection of Main and Albany Street. Appendix I contains an analysis of the water quality provided by Sweetwater Authority.

Water to be used in the proposed Chula Vista II turbine inlet fogging system is treated by an on-site demineralizing system to ensure the quality of water required for induction into the engines. The water quality is satisfactory for existing uses on-site and supplementary uses.

1.18 Water supply agreement / proof of water supply

The Sweetwater Authority has agreed to supply the site with sufficient water to meet the domestic water and fire flow requirements for the proposed Chula Vista II project. Please refer to the letter in Appendix H for confirmation of service.

2 Site Description

2.1 Site Address

3497 Main Street
Chula Vista, CA 91911

2.2 Assessor's parcel number

APN 629-06-204.

2.3 Names and addresses of all property owners within 500 feet of the project site or related facilities.

Please refer to Appendix L, Adjacent Property Owners List.

2.4 Existing site use

The existing site use consists of an existing peaker (Chula Vista I) power plant currently under construction on the southern portion of the lot and a construction services area required for construction of the existing Chula Vista I plant.

2.5 Existing site characteristics

The site is flat, graded and unpaved.

2.6 Layout of site

Please refer to Appendix B, Site Plan and Equipment-Lay-Down.

2.7 Zoning and general plan designation of site and linear facilities

The General Plan and Zoning designation of the site is Research/Limited Industrial. The site has an Approved Conditional Use Permit from the City of Chula Vista Redevelopment Agency for the existing Chula Vista I facility.

2.8 Ownership of site

John and Carole Marquez
310 K Street
Chula Vista, CA

2.9 Status of site control

Site is under lease to PG&E Dispersed Generating Company, LLC (PG&EDG). PG&EDG has sold its rights to RAMCO, Inc under separate agreement.

2.10 Equipment lay-down area

The lay-down area for the proposed Chula Vista II unit is to the west and north of the site on the contiguous parcel to the west and has been selected as preferred for both the construction parking and lay-down area. Appendix B contains a site plan showing the lay-down area in relation to the site. The lay-down area is less than half of the currently vacant lot that was formerly used as a trailer storage lot.

3 Construction Description

3.1 Construction schedule

Construction will commence on June 15, 2001, provided all state and local permits have been issued. It is anticipated that the proposed turbine will be operational by September 30, 2001. Please refer to Appendix J for the detailed construction schedule.

3.2 Workforce requirements

Workforce requirements are estimated to be 60-75 workers at the peak with an average number of workers of 30-35.

4 Power Purchase Contract

4.1 Status of negotiations and expected signing date

The existing Chula Vista I facility has an ISO contract for summer reliability. The proposed Chula Vista II facility will utilize an additional ISO contract for summer reliability transferred from another site. These ISO contracts were executed on November 27, 2000. Negotiations are in progress with DWR to convert these contracts to contracts with DWR.

5 Air Emissions

5.1 Nearest monitoring station

80 J Street
Chula Vista, CA
Latitude: 32.6228N
Longitude: 117.0561W

5.2 Provide complete self-certification air permit checklist

Please refer to CEC Application Attachments B & C at the end of Section 5.

5.3 Provide complete air permit application

Please refer to Appendix T, Authority To Construct Application.

5.4 Status of air permit application with air district

The Authority To Construct was filed on March 7, 2001.

5.5 Status of offsets and/or mitigation fees, as required

No offsets will be required at the Chula Vista site for the proposed Chula Vista II unit (combined with the existing Chula Vista I facility) as air emissions will remain below the major source thresholds for each criteria pollutant.

ATTACHMENT B
California Energy Commission
Air Quality Self-Certification Checklist for Simple-Cycle Gas Turbine Generation Units

License Application for:

- [] New Emissions Unit(s) at a New Stationary Source
[X] New Emissions Unit(s) at an Existing Stationary Source

DISTRICT: San Diego	DATE: May 11, 2001
------------------------	-----------------------

FACILITY INFORMATION

License to be Issued to: RAMCO, Inc.		
Mailing Address: 6362 Ferris Square, Suite C		
City: San Diego	State: CA	Zip Code: 92121
Address Where Equipment Will be Operated: 3497 Main Street		
City: Chula Vista	State: CA	Zip Code: 91911
Nature of Business: Wholesale Electrical Generation	SIC Code: 5063	
Facility Contact Person: Mr. Richard McCormack	Phone Number: 858-452-5963 ext. 17	
	Fax Number: 858-453-0625	
	Email:	
Application Information Contact Person (if different from above): Mr. Dale Mesplé	Phone Number: 925-672-1657	
	Fax Number: 925-672-7504	
	Email:	
Will the facility be under contract to sell its power within California? [X] Yes [] No If Yes, state the entity contracted with and the percentage of power that will be sold: <u>Under Negotiation</u>		
What is the maximum total electrical output of the new power generation equipment at International Standards Organization (ISO) conditions? 58.0 / 62.4 MW		
Estimated construction start date: <u>06/15/01</u> Estimated completion date: <u>09/30/01</u>		
Length of commissioning period (from date of initial startup): <u>50 days maximum</u>		

Defining Note: Values presented as "#1 / #2" denote Phase I operation with DLN and No SCR / Phase II operation with DLN and SCR / Ox-Cat

NEW EQUIPMENT INFORMATION

TURBINE #1	If multiple identical units, indicate number of units of this type: One (1)		
		58.0 / 62.4	MW
	N/A		
	Manufacturer: Pratt & Whitney		
	Model: FT4C-3F twin pak (two engines)		
Maximum Heat Input (based on HHV of fuel):		741.5 / 797.7	
		MMBtu/hr	
TURBINE #2	If multiple identical units, indicate number of units of this type: N/A		
			MW
	Manufacturer:		
	Model:		
Maximum Heat Input (based on HHV of fuel):		MMBtu/hr	

Best Available Control Technology (BACT)		Emission Level	Control Technology
	NOx	25 / 5 ppmvd @ 15% O ₂ (3-hr rolling average)	Selective catalytic reduction with dry Low-NOx burners
	CO	70 / 6 ppmvd @ 15% O ₂ (1-hr rolling average)	NO BACT REQUIRED / Ox-Cat
	VOC	10 / 2.0 ppmvd @ 15% O ₂ (1-hr rolling average)	Good Combustion Practices / Ox-Cat
	PM10	Emission limit corresponding to natural gas firing (PUC-quality natural gas)	Natural gas firing (PUC-quality natural gas)
	SO2	Emission limit corresponding to natural gas firing (PUC-quality natural gas)	Natural gas firing (PUC-quality natural gas)
	If applicable, NH3	Not applicable / 10 ppmvd @ 15% O ₂	NONE REQUIRED

Selective Catalytic Reduction Information, if applicable	If not indicated, please specify units of measurement:			
	Ammonia Storage Tank(s):	Tank type: Steel – Single Wall		
		Number of tanks: One (1)		
		Tank size: 12,000 gallons; will be filled no more than 85%		
		Reactant type: [] Anhydrous ammonia [X] Aqueous ammonia [] Urea If aqueous ammonia, indicate ammonia concentration: 19.0 %		
		Turnover rate: To be determined		
	SCR Manufacturer:	To be bid		
	SCR Make:	To be bid		
	SCR Model:	To be bid		
	Catalyst dimensions:	Length: TBD	Width: TBD	Height: TBD
	Pressure drop across SCR unit: To be designed			
	Pressure drop across ammonia injection grid: To be designed			
	Space velocity (gas flow rate/catalyst volume): To be designed			
	Area velocity (gas flow rate/wetted catalyst surface area): To be designed			

NEW EQUIPMENT INFORMATION (continued)

Selective Catalytic Reduction Information, if applicable (continued)	Manufacturer's guarantee:	Control efficiency: 80 %	Catalyst life: TBD	ys
	Ammonia injection rate: To be determined			
	NOx concentration into SCR unit:			25 ppmvd @ 15% O2
	SO ₂ oxidation rate: N/A		SO ₃ emissions: N/A	
	Operating temperature range of catalyst: Approx. 800			°F
	Temperature at which ammonia injection will begin: To be Determined			°F

Oxidation Catalyst Information, if applicable	If not indicated, please specify units of measurement:			
	Manufacturer:	To Be Determined		
	Make:	To Be Determined		
	Model:	To Be Determined		
	Catalyst dimensions:	Length: TBD ft	Width: TBD ft	Height: TBD ft
	Pressure drop across catalyst: To be designed			
	Manufacturer's guarantee:	CO control efficiency: TBD %	Catalyst life: TBD	
		VOC control efficiency: TBD %		
	Space velocity (gas flow rate/catalyst volume): To Be Designed			
	Area velocity (gas flow rate/wetted catalyst surface area): To Be Designed			
	Catalyst cell density (cells per square inch): To Be Designed			
	CO concentration into catalyst:			< 70 ppmvd @ 15% O2
	VOC concentration into catalyst:			10 ppmvd @ 15% O2
	Operating temperature range of catalyst: To Be Designed			°F

Fuel Data	Fuel Type: Natural gas		Specify sulfur content if other than 5 gr/100 scf
	Higher Heating Value: 1,000 Btu/scf	Sulfur Content: gr/100 scf	
	Maximum Fuel Consumption Rate: 0.7419 / 0.7977 MMscf/hr		
	Exhaust Data:	Flow: 38.6 / 15.2	M/sec

On-line Normalized Emission Rate	(If corrected to other than 15% O2, indicate at right)			%O ₂
	Specify by units listed below or indicate other values and units at right:			
	NOX	25 / 5 ppmvd on a 3-hr rolling avg.		
	CO	70 / 6 ppmvd on a 1-hr rolling avg.		
	VOC	10 / 2.0 ppmvd on a 1-hr rolling avg.	0.013 / 0.0026	lb/MMBtu; F- Factor
	PM10		0.0066 / 0.0066	lb/MMBtu; EPA AP-42
	SO₂		0.0034 / 0.0034	lb/MMBtu; EPA-AP-42
	If applicable, NH₃	None / 10 ppmvd		

NEW EQUIPMENT INFORMATION (continued)

On-line Mass Emission Rate (each turbine)		Hourly [lbs/hr]	Daily [lbs/day]	Quarterly [lbs/qtr]	Annual [tons/yr]
	NOX	74.33 / 15.99	1,783.99 / 383.76	Variable	49.80 / 49.98
	CO	116.39 / 10.73	2,793.44 / 257.60	Variable	77.98 / 33.54
	VOC	9.50 / 2.04	228.03 / 49.07	Variable	6.37 / 6.39
	PM10	4.89 / 5.27	117.45 / 126.36	Variable	3.28 / 16.45
	SO ₂	2.52 / 2.71	60.51 / 65.10	Variable	1.69 / 8.48
	If applicable, NH3	No SCR /12.9	No SCR / 309.6	Variable	No SCR / 40.31
Startup and Shutdown Mass Emission Rate (each turbine)		Startup Emissions Hourly [lbs/hr]		Shutdown Emissions Hourly [lbs/hr]	
	NOX	To be determined		To be determined	
	CO	To be determined		To be determined	
	VOC	To be determined		To be determined	
	PM10	To be determined		To be determined	
	SO ₂	To be determined		To be determined	
Commissioning Period Mass Emission Rate (each turbine)		Hourly [lbs/hr]		Daily [lbs/day]	
	NOx	148.67 / 79.97		1,783.99 / 959.66	
	CO	332.55 / 125.22		3,990.63 / 1,502.68	
	VOC	9.50 / 10.22		114.02 / 122.64	
	PM10	4.89 / 5.27		58.68 / 63.24	
	SO2	2.52 / 2.71		30.24 / 32.52	

Operating Parameters	Operating Hours:	[hrs/day]	[hrs/qtr]	[hrs/yr]
		24 / 24	Variable	1,340 / 6,250
	Startup Data:	Number of startups per day: To be determined		
		Number of startups per year: To be determined		
		Startup duration: To be determined		
	Shutdown Data:	Number of shutdowns per day: To be determined		
		Number of shutdowns per year: To be determined		
		Shutdown duration: To be determined		

NEW EQUIPMENT INFORMATION (continued)

Facility Annual Emissions and Emissions to be Offset		Facility Annual Emissions [tons/yr]	Emissions That Need to be Offset				
			Q1 [lbs/qtr]	Q2 [lbs/qtr]	Q3 [lbs/qtr]	Q4 [lbs/qtr]	Annual [tons/yr]
	NOx	NOT APPLICABLE – OFFSETS WILL NOT BE REQUIRED					
	CO						
	VOC						
	PM10						
	SO ₂						

Offsets to be Provided (If Necessary)		Offset Ratio	Offsets Required				Source of Offsets
			Q1 [lbs/qtr]	Q2 [lbs/qtr]	Q3 [lbs/qtr]	Q4 [lbs/qtr]	
	NOx	NOT APPLICABLE – OFFSETS WILL NOT BE REQUIRED					<input type="checkbox"/> State bank* <input type="checkbox"/> District bank <input type="checkbox"/> Other, specify: _____
	CO						<input type="checkbox"/> State bank <input type="checkbox"/> District bank <input type="checkbox"/> Other, specify: _____
	VOC						<input type="checkbox"/> State bank <input type="checkbox"/> District bank <input type="checkbox"/> Other, specify: _____
	PM10						<input type="checkbox"/> State bank <input type="checkbox"/> District bank <input type="checkbox"/> Other, specify: _____
	SO ₂						<input type="checkbox"/> State bank <input type="checkbox"/> District bank <input type="checkbox"/> Other, specify: _____

Monitoring and Reporting	What is the make/model of the continuous emissions monitoring system (CEMS), if known? Make: <u>To be Determined</u> Model: <u>To be Determined</u>
	The following parameters will be continuously monitored: <input checked="" type="checkbox"/> NOx <input checked="" type="checkbox"/> CO <input checked="" type="checkbox"/> O ₂ <input checked="" type="checkbox"/> Fuel flow rate <input checked="" type="checkbox"/> Ammonia injection rate <input checked="" type="checkbox"/> Other, please specify: As required by San Diego APCD Authority to Construct
	Will the CEMS be used to measure both on-line and startup/shutdown emissions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

*Note: The initial amount of NOx offsets that can be acquired from the State bank is 21 tons/yr x the applicable offset ratio for each 50 MW of new generating capacity.

ADDITIONAL INFORMATION

1. **Facility Location:** ☐ Urban (area of dense population) ☒ Rural (area of sparse population)

Will the facility be located within 1,000 feet of a school? ☐ Yes ☒ No

(Note: Per Section 42301.9 of the California Health and Safety Code, a "school" means any public or private school used for purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes.)

2. **Nearest Receptor:**

Distance to nearest residence 570 / 425 feet

Distance to nearest business 55 / 110 feet

Air Dispersion Modeling Input Data

3. **Stack Parameters:**

Height 37 ft 2 in / 40 ft Inside diameter 117 in / 268.5 in (effective circular diameter)

Is a rain cap present on the exhaust stack? ☐ Yes ☒ No

Direction of exhaust from structure or device: ☒ Vertical ☐ Horizontal

Building Dimension Data for Downwash Calculations:

a) Building Height 10 ft / 35 ft

b) Minimum horizontal building dimension 20 ft / 38 ft

c) Maximum horizontal building dimension 116.7 ft / 135.4 ft

4. Was an ambient air quality impact analysis required for this project? ☒ Yes ☐ No

If Yes, was an ambient air quality impact analysis conducted as required by District rules? ☒ Yes ☐ No

If Yes, please attach the analysis and provide an electronic version on disk or CD.

5. Was a health risk assessment required for this project? ☒ Yes ☐ No

If Yes, was a health risk assessment conducted as required by District rules? ☒ Yes ☐ No

If Yes, please attach the analysis and provide an electronic version on disk or CD.

6. Please attach a site map for the project.

CERTIFICATION

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are, true, accurate, and complete.

Richard A. McCormack

Responsible Official (Please Print Name)

Richard A. McCormack

Signature of Responsible Official

5/11/01

Date

ATTACHMENT C
California Energy Commission
Air Quality Application for Simple-Cycle Gas Turbine Generation Units
AUTHORITY TO CONSTRUCT

Authority to Construct No.:

EQUIPMENT DESCRIPTION:

This Authority To Construct Is Issued And Is Valid For This Equipment Only While It Is In The Configuration Set Forth In The Following Description:

Installation Of A Simple-Cycle Gas Turbine Generator Consisting Of:

1. Initial Installation (see Alternative Emission Limits) Simple Cycle Gas Turbine, Pratt & Whitney, FT4C-3F, 741.5 MMBtu/hr, 58.0 MW at ISO conditions, Natural Gas-Fired. Final Installation (see Permit Conditions) Simple Cycle Gas Turbine, Pratt & Whitney, FT4C-3F, 797.7 MMBtu/hr, 62.4 MW at ISO conditions, Natural Gas-Fired.
2. Selective Catalytic Reduction NO_x Control System, To be bid; available upon procurement.
3. Ammonia Injection System, To be bid; available upon procurement. (including the ammonia storage tank and control system)
4. Oxidation Catalyst System, To be bid; available upon procurement.
5. Continuous emission monitoring system (CEMS) designed to continuously record the measured gaseous concentrations, and calculate and continuously monitor and record the NO_x and CO concentrations in ppmvd corrected to 15% oxygen on a dry basis.

PERMIT CONDITIONS:

The Equipment For Which This Authority To Construct Is Issued May Be Operated Only When In Compliance With The Following Conditions:

1. Consistency with Analyses: Operation of this equipment shall be conducted in accordance with all information submitted with the application (and supplements thereof) and the analyses under which this permit is issued unless otherwise noted below.
2. Conflicts Between Conditions: In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible.
3. Reimbursement of Costs: All reasonable expenses, as set forth in the District's rules or regulations, incurred by the District for all activities that follow the issuance of this permit, including but not limited to permit condition implementation, compliance verification and

emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by the owner/operator as required by the District's rules or regulations.

4. Access to Records and Facilities: As to any condition that requires for its effective enforcement the inspection of records or facilities by representatives of the District, the Air Resources Board (ARB), the U.S. Environmental Protection Agency (U.S. EPA), or the California Energy Commission (CEC), the owner/operator shall make such records available or provide access to such facilities upon notice from representatives of the District, ARB, U.S. EPA, or CEC. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A.
5. Notification of Commencement of Operation: The owner/operator shall notify the District of the date of anticipated commencement of turbine operation not less than 10 days prior to such date. Temporary operations under this permit is granted consistent with the District's rules and regulations.
6. Operations: The gas turbine, emissions controls, CEMS and associated equipment shall be properly maintained and kept in good operating condition at all times when the equipment is in operation.
7. Visible Emissions: No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringlemann 1 or equivalent 20% opacity.
8. Emissions Limits:
 - 8.1 Oxides of nitrogen (NO_x) emissions from the gas turbine shall not exceed 5 ppmvd @ 15% O₂ (3-hour rolling average), except during periods of startup and shutdown as defined in this permit. The NO_x emission concentration shall be verified by a District-approved continuous emission monitoring system (CEMS) and during any required source test.
 - 8.2 Ammonia emissions from the gas turbine shall not exceed 10 ppmvd @ 15% O₂ ; except during periods of startup and shutdown as defined in this permit. The ammonia emission concentration shall be verified by the continuous recording of the ratio of the ammonia injection rate to the NO_x inlet rate to the SCR control system (molar ratio). A minimum NH₃/NO_x molar ratio of 1.0 shall be used at all times. The maximum allowable NH₃/NO_x molar ratio shall be determined during any required source test, and shall not be exceeded until reestablished through another valid source test.
 - 8.3 Carbon monoxide (CO) emissions from the gas turbine shall not exceed 6 ppmvd @ 15 % O₂ (1-hour rolling average), except during periods of startup and shutdown as defined in this permit. The CO emission concentration shall be verified by a District-approved CEMS and during any required source test.
 - 8.4 Volatile organic compound (VOC) emissions from the gas turbine shall not exceed 2 ppmvd @ 15% O₂ (1-hour rolling average), except during periods of startup and shutdown as defined in this permit. The VOC emission concentration shall be verified during any required source test.

- 8.5 Particulate matter emissions less than ten microns in diameter (PM10) from the gas turbine shall not exceed 5.3 pounds per hour, except during periods of startup and shutdown as defined in this permit. The PM10 mass emission rate shall be verified during any required source test.
- 8.6 Oxides of sulfur emissions (SOx) from the gas turbine shall not exceed 2.7 pounds per hour, except during periods of startup and shutdown as defined in this permit. The SOx emission rate shall be verified during any required source test.
9. Turbine Startup: Startup of the gas turbine shall not exceed a time period of 10 minutes each per occurrence, or another time period based on good engineering practice and approved in advance by the District. The startup clock begins with the turbine's initial firing and continues until the unit meets the emission concentration limits.
10. Turbine Shutdown: Shutdown of the gas turbine shall not exceed a time period of 10 minutes each per occurrence, or another time period based on good engineering practice and approved in advance by the District. Shutdown begins with initiation of the turbine shutdown sequence and ends with the cessation of turbine firing.
11. Mass Emission Limits: Mass emissions from the gas turbine shall not exceed the daily, quarterly, and annual mass emission limits listed in Table 1 and Table 2 below.

TABLE 1 – MASS EMISSION LIMITS (EXCLUDING STARTUPS AND SHUTDOWNS)

Pollutant	Daily (lb)	Quarterly (tons)	Annual (tons)
NOx (as NO ₂)	383.9	Variable	49.98
VOC	49.1	Variable	6.39
CO	257.6	Variable	33.54
SOx (as SO ₂)	65.1	Variable	8.48
PM10	126.4	Variable	16.45

TABLE 2 – MASS EMISSION LIMITS - STARTUPS AND SHUTDOWNS

Pollutant	Annual (tons)
NOx (as NO ₂)	To be determined (TBD)
VOC	(TBD)
CO	(TBD)
SOx (as SO ₂)	(TBD)
PM10	(TBD)

The daily, quarterly and annual mass limits are on a calendar basis. Compliance shall be based on sliding average one-hour readings through the use of process monitors (e.g.,

fuel use meters), CEMS, and source test results; and the monitoring, recordkeeping and reporting conditions of this permit.

12. Operational Limits: In order to comply with the emission limits of this rule, the owner/operator shall comply with the following operational limits:

- (a) The heat input to the gas turbine shall not exceed the following:

Hourly: 797.7 MMBtu/hr
Daily: 19,145 MMBtu/day
Quarterly: n/a MMBtu/quarter
Annual: 4,985,625 MMBtu/year

- (b) Only PUC Quality natural gas (General Order 58-a) shall be used to fire the gas turbine. The natural gas shall not contain total sulfur in concentrations exceeding 5 gr/100 scf or hydrogen sulfide exceeding 0.25 gr/100 scf.
- (c) The owner/operator of the gas turbine shall comply with the daily, quarterly, and annual emission limits listed in Table 1 by not operating more than 24 hours per day, n/a hours per calendar quarter, or 6,250 hours per year.
- (d) The damper on the gas turbine bypass stack shall remain in a fully closed position except during periods of startup and shutdown as defined in this permit.
- (e) The owner/operator of the gas turbine shall comply with the annual emission limits listed in Table 2 by limiting the turbine startups to no more than variable occurrences per year, and by limiting turbine shutdowns to no more than variable occurrences per year.

13. Monitoring Requirements: The owner/operator shall comply with the following monitoring requirements:

- (a) The gas turbine exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods.
- (b) The ammonia injection system shall be equipped with an operational ammonia flowmeter and injection pressure indicator accurate to plus or minus five percent at full scale and calibrated once every twelve months.
- (c) The gas turbine exhaust shall be equipped with continuously recording emissions monitor(s) for NO_x, CO and O₂. Continuous emissions monitors shall comply with the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring concentrations and mass emissions during normal operating conditions and during startups and shutdowns.
- (d) The fuel heat input rate shall be continuously recorded using District-approved fuel flow meters along with quarterly fuel compositional analyses for the fuel's higher heating value (wet basis).
- (e) The total sulfur and hydrogen sulfur content of the fuel gas shall be analyzed on a quarterly basis.

14. Source Testing/RATA: Within sixty days after startup of the gas turbines, and at a minimum on an annual basis thereafter, a relative accuracy test audit (RATA) must be performed on the CEMS in accordance with 40 CFR Part 60 Appendix B Performance Specifications and a source test shall be performed. Additional source testing may be required at the discretion of the District to address or ascertain compliance with the requirements of this permit. The written test results of the source tests shall be provided to the District within thirty days after testing. A complete test protocol shall be submitted to the District no later than 30 days prior to testing, and notification to the District at least ten days prior to the actual date of testing shall be provided so that a District observer may be present. The source test protocol shall comply with the following: measurements of NO_x, CO, VOC, and stack gas oxygen content shall be conducted in accordance with ARB Test Method 100; measurements of PM₁₀ shall be conducted in accordance with ARB Test Method 5; and measurements of ammonia shall be conducted in accordance with Bay Area Air Quality Management District test method ST-1B. Alternative test methods, and source testing scope, may also be used to address the source testing requirements of the permit if approved in advance by the District. The initial and annual source tests shall include those parameters specified in the approved test protocol, and shall at a minimum include the following:
- a. NO_x (as NO₂) – ppmvd at 15% O₂ and lb/MMBtu (inlet to SCR (if applicable), and Exhaust);
 - b. Ammonia – ppmvd at 15% O₂ (Exhaust);
 - c. CO – ppmvd at 15% O₂ and lb/MMBtu (Exhaust);
 - d. VOC – ppmvd at 15% O₂ and lb/MMBtu (Exhaust);
 - e. PM₁₀ – lb/hr (Exhaust);
 - f. SO_x – lb/hr (Exhaust);
 - g. Natural gas consumption, fuel High Heating Value (HHV), and total fuel sulfur content;
 - h. Turbine load in megawatts;
 - i. Stack gas flow rate (SDCFM) calculated according to procedures in U.S. EPA Method 19.
 - j. Exhaust gas temperature (°F)
 - k. Ammonia injection rate (lb/hr or moles/hr)
15. A written quality assurance program must be established in accordance with 40 CFR Part 75, Appendix B and 40 CFR Part 60 Appendix F.
16. The owner/operator shall comply with the applicable requirements of 40 CFR Part 60 Subpart GG.
17. The owner/operator shall notify the District of any breakdown condition consistent with the District's breakdown regulations.
18. The District shall be notified in writing in a timeframe consistent with the District's breakdown regulations following the correction of any breakdown condition. The breakdown condition shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the actions taken to restore normal operations.

19. Recordkeeping: The owner/operator shall maintain the following records:
- (a) hourly, daily, quarterly and annual quantity of fuel used and corresponding heat input rates;
 - (b) the date and time of each occurrence, duration, and type of any startup, shutdown, or malfunction along with the resulting mass emissions during such time period;
 - (c) emission measurements from all source testing, RATAs and fuel analyses;
 - (d) daily, quarterly and annual hours of operation;
 - (e) hourly records of NO_x and CO, emission concentrations and hourly ammonia injection rates and ammonia/NO_x ratio.
 - (f) for the continuous emissions monitoring system; performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period of non-operation of any continuous emissions monitor.
20. All records required to be maintained by this permit shall be retained by the permittee for a period of five years and shall be made readily available for District inspection upon request.
21. Reporting: The owner/operator shall submit to the District a written report for each calendar quarter, within 30 days of the end of the quarter, which shall include:
- (a) Daily and quarterly fuel use and corresponding heat input rates;
 - (b) Daily and quarterly mass emission rates for all criteria pollutants during normal operations and during other periods (startup/shutdown, breakdowns);
 - (c) Time intervals, date, and magnitude of excess emissions;
 - (d) Nature and cause of the excess emission, and corrective actions taken;
 - (e) Time and date of each period during which the CEM was inoperative, except for zero and span checks, and the nature of system repairs and adjustments;
 - (f) A negative declaration when no excess emissions occurred;
 - (g) Results of quarterly fuel analyses for HHV and total sulfur/hydrogen sulfide content; and
 - (h) A declaration that the owner/operator is in compliance with Governor's Executive Order D-26-01 and any other applicable Executive Order.
22. Emission Offsets: The owner/operator shall offset the project emissions in the amount and at the ratios outlined in Table 3. Emission offsets obtained through the State emission offset bank shall be valid for three years from the issuance of this permit at which time they shall become null and void. The owner/operator shall either obtain replacement emission offsets from the District or shall cease operations at the end of this 3-year period.

TABLE 3 – EMISSION OFFSETS

Pollutant	Emissions Requiring Offsets (tons/yr)	Offset Ratio	Total ERCs Required (tons/yr)	Source of ERCs
NO _x (as NO ₂)	n/a	n/a	n/a	n/a
VOC	n/a	n/a	n/a	n/a
CO	n/a	n/a	n/a	n/a
SO _x (as SO ₂)	n/a	n/a	n/a	n/a
PM ₁₀	n/a	n/a	n/a	n/a

23. Executive Order Compliance: The owner/operator shall comply with the provisions of Governor's Executive Order D-26-01 and any other applicable Executive Order.
24. District Operating Permit: The owner/operator shall apply for and obtain all required operating permits from the District according to the requirements of the District's rules and regulations.

ALTERNATIVE EMISSION LIMITS

FOR CAUSE, AN APPLICANT MAY PROPOSE AN ALTERNATE NO_x EMISSION LIMIT UP TO, BUT NOT EXCEEDING, 25 PPM FOR THE SUMMER OF 2001. HOWEVER, THE APPLICANT MUST APPLY BACT AND MEET A NO_x EMISSION LIMIT OF 5 PPM PRIOR TO JUNE 1, 2002. THE FOLLOWING ALTERNATE CONDITION 8 SHOULD BE USED IN THIS SITUATION.

8. Emission Limits:
 - 8.1. Oxides of nitrogen (NO_x) emissions from the gas turbine shall not exceed 25 ppmvd @ 15% O₂ (3-hour rolling average), except during periods of startup and shutdown as defined by this permit, through May 31, 2002. By June 1, 2002, NO_x emissions from the gas turbine shall not exceed 5 ppmvd @ 15% O₂ (3-hour rolling average), except during startup and shutdown. The NO_x emission concentrations shall be verified by a District-approved continuous emission monitoring system (CEMS) and during any required source test.
 - 8.2. By June 1, 2002, ammonia emissions from the gas turbine shall not exceed 10 ppmvd @ 15% O₂ ; except during periods of startup and shutdown as defined in this permit. The ammonia emission concentration shall be verified by the continuous recording of the ratio of the ammonia injection rate to the NO_x inlet rate to the SCR control system (molar ratio). A minimum NH₃/NO_x molar ratio of 1.0 shall be used at all times. The maximum allowable NH₃/NO_x molar ratio shall be determined during any required source test, and shall not be exceeded until reestablished through another valid source test.

- 8.3. By June 1, 2002, carbon monoxide (CO) emissions from the gas turbine shall not exceed 6 ppmvd @ 15 % O₂ (1-hour rolling average), except during periods of startup and shutdown as defined in this permit. The CO emission concentration shall be verified by a District-approved CEMS and during any required source test.
- 8.4 By June 1, 2002, volatile organic compound (VOC) emissions from the gas turbine shall not exceed 2 ppmvd @ 15% O₂ (1-hour rolling average), except during periods of startup and shutdown as defined in this permit. The VOC emission concentration shall be verified during any required source test.
- 8.5 Particulate matter emissions less than ten microns in diameter (PM₁₀) from the gas turbine shall not exceed 4.9 pounds per hour, except during periods of startup and shutdown as defined in this permit. The PM₁₀ mass emission rate shall be verified during any required source test.
- 8.6 Oxides of sulfur emissions (SO_x) from the gas turbine shall not exceed 2.5 pounds per hour, except during periods of startup and shutdown as defined in this permit. The SO_x emission rate shall be verified during any required source test.

6 Noise

6.1 Local noise requirements

Please refer to Appendix N, Noise Impact Analysis for Chula Vista I. Note that Appendix N contains two reports. The first “Noise Impact Analysis” was prepared in May 2000. The second, “Chula Vista Power Plant Noise Report”, dated December 7, 2000, addressed the plant noise emissions and their mitigation for Chula Vista I.

6.2 Nearest sensitive receptor

Please refer to Appendix N, Noise Impact Analysis.

6.3 Project noise level at nearest property line

Please refer to Appendix N, Noise Impact Analysis. Noise will be mitigated for the proposed unit to 60 dB(A) at the southern property line. During the initial operating period, temporary noise mitigation devices will be employed.

6.4 Proposed mitigation if required

Please refer to Appendix N, Noise Impact Analysis. Noise will be reduced for the proposed expanded unit to 60 dB(A) at the southern property line. The noise monitoring program approved by the City of Chula Vista in the Mitigated Negative Declaration for the existing Chula Vista I unit will be utilized for the proposed unit to ensure compliance. The same procedures used for Chula Vista I and outlined in Appendix N will be used to ensure compliance for Chula Vista II. Please refer to the letter from Tony Nash addressing the addition of the proposed Chula Vista II facility.

7 Hazardous Materials

7.1 Type and volume of hazardous materials onsite

Hazardous materials stored on-site during operations are the aqueous ammonia (12,000 gallons), equipment lubricating oils and transformer oils (5,500 gallons) and a 25 gallon drum of engine lubricating oil for make up. These materials are associated with the existing Chula Vista I facility. An additional 12,000-gallon aqueous ammonia tank and containment structures, lubricating and transformer oils, and a 25 gallon drum of engine lubricating oil will be required for operation of the proposed Chula Vista II facility.

There will be minimal hazardous materials on-site during construction including motor fuel and oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, lubricants and paint. Construction personnel will be trained to handle these materials and in clean-up procedures should spills occur.

7.2 Storage facilities and containment

Aqueous ammonia is stored in a 12,000-gallon steel tank within a containment basin that has a capacity of 150% of the ammonia volume. The containment basin is designed to contain the entire contents of the ammonia tank in the event of failure for any reason. The 25-gallon drum of engine oil is stored on-site in an integral secondary containment base. The transformer oil is contained within a closed system within a secondary containment area. The engine lubricating oil is contained within a closed system connected to a nuisance fluid drainage and collection system.

These storage facilities will be duplicated for the proposed Chula Vista II unit.

8 Biological resources

8.1 Legally protected species and their habitat on-site, adjacent to site and along right of way for linear facilities

The Chula Vista site is devoid of vegetation except for plant material located in the drainage swale along the western property boundary. No animal species are present on-site. The site has not served as a wildlife dispersal corridor because the property has been fenced for several years. The area immediately south of the project site is a heavily vegetated riparian habitat associated with the Otay River. The Otay Valley Regional Park Concept Plan and the City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan identifies the adjacent area as “open space/preserve area.” The areas to the north, east and west are developed industrial uses. For additional information refer to Appendix O, Biological Resources Survey conducted for the existing facility environmental review.

8.2 Designated critical habitat on-site or adjacent to site

The Chula Vista site is devoid of critical habitat. The property to the south is riparian habitat. Riparian woodland vegetation is present immediately beyond the southern fence line of the site. Indicators in this habitat include Black and Arroyo Willow, San Diego Marsh Elder, American Bulrush and Cattails. This riparian area supports a diversity of native species, including, Song Sparrows, Yellow Warblers, Least Bell’s Vireos and others. Noise produced by the operation of the existing Chula Vista I and the proposed Chula Vista II, if not mitigated, could result in adverse impacts to sensitive species occupying the riparian habitat south of the project site. Please refer to Appendix O, Biological Resources Survey for further information.

8.3 Proposed mitigation as required

Mitigation of potential noise to ensure no adverse impacts to the sensitive species is accomplished by reducing noise levels from the existing Chula Vista I facility and the proposed Chula Vista II facility to a level of 60 dba or less during the mating and nesting seasons for the sensitive species. To meet this requirement the noise level at the southern property line will be reduced to 60 dB(A) throughout the entire year. A six-step mitigation and monitoring program was developed for the existing Chula Vista I. That same program will be used for the construction and operation of the proposed Chula Vista II. Please refer to Appendix O, Biological Resources Survey and Appendix N, Noise Impact Analysis.

9 Land Use

9.1 Local land use restrictions

The Chula Vista project site and the lands to the north, east, and west are designated for industrial use in the City's General Plan, and the Southwest Area Redevelopment Plan. Electrical generating plants are a conditionally allowed use. The existing Chula Vista I peaker power plant facility Conditional Use Permit was approved in September 2000.

9.2 Use of adjacent parcels

Existing industrial activities are located adjacent on the north and east sides of the project's Chula Vista site. The land adjacent to the west is vacant. Please refer to Appendix G, Aerial Photograph.

9.3 Ownership of adjacent parcels – site and linears

Please refer to Appendix L, Adjacent Property Ownership List. All linears are in the public right-of-way or easements except for an easement from Main Street, that is owned by John and Carole Marquez.

9.4 Demographics of census tract where project is located

Census Tract:	0132.04
Population:	3,501
Households:	1,107
Source:	1990 Census

10 Public Services

10.1 Ability to serve letter from Fire District

The existing plant is served by an 8-inch fire main and two hydrants. The Chula Vista Fire Department requires that 1,500 gpm water flow at 20 psi be available to serve the plant.

A Fire Hydrant Flow Test conducted by the Sweetwater Authority for the fire hydrant located at Main & Albany Street indicated a flow rate well in excess of the required 1500 gpm (2024 gpm) and a residual pressure, R, greater or equal to 20 psi (62 psi).

The “Mitigated Negative Declaration” prepared by the City of Chula Vista for the existing Chula Vista I unit indicates that the “Fire Department has specified that the existing access road be improved to a minimum 20-foot wide all weather driving surface between Main Street and the project site.” This has been accomplished. Further, regarding the City’s Fire Service Threshold Standards, the Mitigated Negative Declaration states “The City of Chula Vista has indicated that this threshold will be met, since the nearest fire station is three miles away and will be associated with a six-minute response time. The fire/EMS threshold will be met as reported by the Fire Department.” Since the Chula Vista II plant is located on the same site as the existing Chula Vista I plant, the City of Chula Vista Fire Department’s requirements and Threshold Standards will be met by the proposed Chula Vista II plant. This has been confirmed by the Chula Vista Fire Department. Please refer to Appendix K, Ability to Serve Letter from Fire District (City of Chula Vista Fire Department).

10.2 Nearest fire station

1200 Fourth Avenue
Chula Vista, CA

11 Traffic and Transportation

11.1 Level of Service (LOS) measurements on surrounding roads – a.m. and p.m. peaks

Main between Albany and Hilltop:

A.M. Peak: East Bound: LOS A (11:45 a.m. – 12N)
West bound: LOS A (11:45 a.m. – 12N)
P.M. Peak: East bound: LOS A (4:45 p.m. – 5:00 p.m.)
West bound: LOS A (4:45 p.m. – 5:00 p.m.)

11.2 Traffic Control Plan for roads during construction period

No traffic control will be required as no construction will take place in public right's-of-way.

11.3 Traffic impact of linear facility construction

The proposed Chula Vista II unit will have no traffic impact because all linear construction was completed with the construction of the existing Chula Vista I unit.

11.4 Equipment transport route

Equipment transportation routes to be determined at time of delivery. There will be no more than 5 permitted loads that will be coordinated with the City of Chula Vista and the California Highway Patrol.

11.5 Parking requirements – workforce and equipment

Parking for workforce will require 75 spaces during the peak work period. The lay down area described in Section 2.10 will be utilized for parking.

12 Soils and Water Resources

12.1 Wastewater volume, quality, treatment

The majority of wastewater discharged from the proposed Chula Vista II facility will be storm water collected in secondary containment areas. All wastewater discharged from this facility will have minimal contamination and will require no treatment prior to discharge into the sewer system. If contaminated, wastewater will be pumped out of the containment areas and disposed of following appropriate safety and handling procedures and regulations.

All surface storm water run off, not diverted to containment areas, will be directed to the storm water outfall and energy dissipator for release into the natural drainage channel in the Otay River.

The proposed Chula Vista II facility will have two containment areas and a containment pond to minimize the potential release of non-storm water materials (transformer oil, aqueous ammonia) into the Otay River. The aqueous ammonia tank and electrical switchyard containment areas will be sized to hold 150% of the tank volume of ammonia and electrical transformer oil, respectively. The containment areas will also be sized to hold 150% of the rainfall falling within a containment area during a 100-year storm event. The switchyard facility, containing transformers filled with non-PCB oil, will be surrounded by a containment dike. In the event that an oil leak occurs, all oil will be contained within the diked area. The 12,000-gallon aqueous ammonia tank will also be enclosed within a containment dike and is designed to contain the entire tank contents in the event of tank failure. In the event of an ammonia tank leak, all ammonia will be contained within the diked area. The plant operator/maintenance personnel will inspect the containment areas during their normal plant inspections. In the event of an oil or ammonia leak, the containment basins will be pumped out and disposed of as required by County of San Diego Department of Environmental Health (DEH) and Regional Water Quality Control Board (RWQCB) regulations.

The switchyard and ammonia tank containment areas will be connected to a containment pond designed to prevent the release of non-storm water materials into the storm water drain system. The plant operator/maintenance personnel will inspect the switchyard and aqueous ammonia containment areas during and after rainstorms. Storm water collected in the diked containment areas and contaminated with ammonia or oils will be pumped into a tank truck for removal from the site as required by City, DEH, and RWQCB regulations. If oil or ammonia are not present, the storm water in the containment areas will be released into the containment pond.

After storm water is transferred to the containment pond it will be inspected a second time for oil, ammonia or other contaminants. If none are present, the operator/maintenance personnel will open the valves releasing the storm water into the sewer system. If contaminants are present, the containment pond will be pumped out and the materials disposed of as required by City, DEH, and RWQCB regulations. Back up

warning devices on the valves will warn operators if the valves are inadvertently left open.

The proposed Chula Vista II facility will be required to obtain a State Industrial Activities Storm Water General Permit as required by Federal Regulations (40CFR, Parts 122,123, and 124) that implement the Clean Water Act of 1987. The goal of the permit is to reduce or eliminate storm water pollution and other impacts to surface waters from industrial sites. The storm water permit requires operators of industrial facilities to develop a Storm Water Pollution Prevention (SWPP) Plan. The plan will identify existing and potential sources of storm water pollution, and describe how the facility will reduce or eliminate the potential for storm water pollution. The plan will display a storm water site map identifying drainage patterns, discharge structures and points, paved areas and buildings, areas of pollutant contact, and areas with soil erosion potential. The plan will include Best Management Practices (BMP's) to reduce the potential for storm water pollution. The plan will include good housekeeping, preventive maintenance, spill clean-up procedures, stormwater flow control features, and employee training. The plan will identify practices and facility features designed to control pollution at its source. Another requirement is the development and implementation of a Storm Water Monitoring Plan in conjunction with the SWPP plan. RAMCO will work closely with the Regional Water Quality Control Board (RWQCB) to determine BMP's and identify most effective way to design features to control potential storm water contamination.

12.2 Status of permits for wastewater discharge or draft permit (WDR/NPDES)

Industrial User Discharge Permit:

An Industrial User Discharge Permit Application has been completed for the existing Chula Vista I Power Generation site. The City of San Diego and the City of Chula Vista have approved this Permit for construction purposes and will be completed when the Chula Vista I facility is on-line. Please refer to Appendix P, IUD Permit Application. A permit modification to include the proposed Chula Vista II unit will be filed and will meet the same requirements as the existing Chula Vista I unit.

Industrial Activities Storm Water General Permit:

An Industrial Activities Storm Water General Permit will be required for the Chula Vista II facility once operations begin. A Notice of Intent (NOI) has been prepared for the State Water Resource Control Board for review and approval. Due to the size of the facility (<5 acres), a General Permit for Construction Activities is not required. Please refer to Appendix Q, Industrial Activities Storm Water General Permit NOI. An amendment will be filed to include the proposed Chula Vista II unit as the existing permit requirements will accommodate the proposed facility.

Risk Management Plan (RMP):

Under the California Accident Release Prevention Program (CalARP), the proposed Chula Vista II facility is required to submit a Risk Management Plan for Aqueous

Ammonia (<19%). This program is focused on minimizing the potential for accidental releases of Ammonia, emergency response, and release mitigation. The County Department of Environmental Health, Hazardous Materials Division (HMD) has reviewed the RMP and deemed it complete. This facility is in compliance with the CalARP Program and the RMP is currently under public review. Please refer to Appendix R, RMP Public Document. The RMP will be amended to include the Chula Vista II unit and will meet the same requirements.

Hazardous Materials Business Plan:

The Hazardous Materials Business Plan has been reviewed by the County Department of Environmental Health, Hazardous Materials Division. The plan is focused on emergency response, hazardous materials storage and training. The current Business Plan is as accurate as possible, however, minor modifications will be needed prior to Chula Vista I facility start-up. Please refer to Appendix S, Hazardous Materials Business Plan. The Business Plan will be modified to include the proposed Chula Vista II unit.

12.3 Draft Erosion Prevention and Sedimentation Control Plan or Mitigation Strategy

The existing Chula Vista I drainage pattern (approved by the City of Chula Vista) will be maintained. Development of the proposed Chula Vista II facility will result in a less than significant increase in the rate and volume of surface runoff and will not require changes or additions to the approved drainage plan. Therefore, the same approved drainage plan will apply to the proposed Chula Vista II project.

12.4 Spill Prevention/Water Quality Protection Plans

A Storm Water Pollution Prevention Plan (SWPP) and Storm Water Monitoring Plan are in development for the existing Chula Vista I facility. These plans will be amended to include the proposed Chula Vista II unit.

13 Cultural Resources

13.1 Identification of known historic/prehistoric sites

As part of the approval process for the Chula Vista I facility, an Environmental Initial study was completed. The Mitigated Negative Declaration findings are that there are no known cultural resources on the project site, or in the immediate surrounding area. The site has been previously filled with imported material from an unknown source. Consequently, the proposed Chula Vista II project will not result in a significant impact to cultural resources. Please refer to Appendix U, Mitigated Negative Declaration and Initial Study for the Chula Vista I Unit.

13.2 Proposed mitigation if required

No mitigation is required.

13.3 Notification of Native Americans

No notice is required.

14 Paleontological Resources

14.1 Identification of known paleontological sites

As part of the approval process for the Chula Vista I facility, an Environmental Initial Study and Mitigated Negative Declaration was completed. The Mitigated Negative Declaration findings are that the site has been graded and imported fill material placed on-site. Adjacent areas to the east and west have been similarly graded and filled. There are no known paleontological resources on the site or in the adjacent area. Consequently, the proposed Chula Vista II project will not result in a significant impact to paleontological resources. Please refer to Appendix U, Mitigated Negative Declaration and Initial Study for the Chula Vista I Unit.

14.2 Proposed mitigation if required

No mitigation is required.

15 Visual resources

15.1 Plan for landscaping and screening to meet local requirements

Please refer to Appendix F, Landscape Plan. No additional landscaping is required for the proposed Chula Vista II facility as site is completely screened with the landscaping approved for the existing Chula Vista I facility.

15.2 Full size color photo of the site and rendering of proposed facility with any proposed visual mitigation if available

Please refer to Appendix G, Aerial Photograph and Appendix F, Landscape Plan.

16 Transmission System Engineering

16.1 Conformance with Title 8, High Voltage Electrical Safety Orders, CPUC General Order 95 (or NESC), CPUC Rule 21, PTO Interconnection Requirements, and National Electric Code

Please refer to Appendix H for the one-line diagrams of the interconnection facilities installed for the existing Chula Vista I. No additional facilities are required.